Aircraft De-Icing Market Research Report - Global Forecast till 2025

Market Snapshot

The Global Aircraft De-Icing Market is expected to register a 5.92% CAGR during the forecast period.

De-icing is the process of removing ice, snow, or frost from the surface of aircraft. Chemicals are applied for de-icing and preventing the formation of ice for a certain time period on the surface of the aircraft. For the process of de-icing, type I de-icing fluid is applied to aircraft surfaces to remove accumulated ice or snow. After the application of type I fluid, the type IV anti-icing fluid is sprayed on the aircraft, which assists in preventing re-accumulation of snow or ice before take-off. Additionally, all airline operators must comply with the US Federal Aviation Administration (FAA) Clean Aircraft Concept, which restricts take-off with snow or ice accumulated on critical surfaces of an aircraft as it may decrease lift and lead to accidents.

Global Aircraft de-icing Market Growth, 2018–2025

Source: MRFR Analysis

The global aircraft de-icing market is growing rapidly due to an increase in air passenger traffic and subsequent demand for new aircraft, modernization, and expansion of existing airports, and the need for safe take-off and landing operations during wintry weather conditions. North America is estimated to be a prominent region for the aircraft de-icing market due to the presence of major manufacturers, such as Textron Inc., The Dow Chemical Company, and United Technologies Corporation. Europe is expected to be the second-largest market due to the increasing demand for aircraft de-icing equipment in the region.

In 2018, North America accounted for 62.23% of the global aircraft de-icing global market, followed
Global Aircraft De-Icing Market Share, by Region, 2018 (%)

Source: MRFR Analysis

Synopsis

The global aircraft de-icing market has been segmented based on equipment, fluid type, application, and region. By equipment, the market has been classified as de-icing trucks, sweepers, and others. The fluid type segments of the market are type I, type II, type III, and Type IV. By application, the market has been classified as commercial and military.

By Equipment
- De-Icing Trucks
- Sweepers
- Others

By Fluid Type
- Type I
- Type II
- Type III
- Type IV

By Application
- Commercial
- Military

By Region
- North America
- Europe
- Asia-Pacific
- Middle East & Africa
- Latin America

Regional Analysis

The global aircraft de-icing market has been segmented, by region, into North America, Europe, Asia-Pacific, Latin America, and the Middle East and Africa. North America is expected to be the largest market for aircraft de-icing. The aircraft de-icing market in North America is expected to register a CAGR of 6.55% during the forecast period. Winters in the US and Canada last for a longer duration and temperatures are harsh and below freezing point. In April 2019, 5.3 inches of snowfall at the O’Hare International Airport in Chicago, US, caused more than 1,000 flight cancellations. Furthermore, a large number of aircraft are being procured to cater to the increasing air passenger traffic, which is boosting the market in the region. According to Boeing, 8,800 aircraft were delivered in North America in 2018. FAA regulations require airline operators to follow de-icing procedures during the winters, which, in turn, is anticipated to boost the growth of the aircraft de-icing market.

The commercial segment is expected to dominate the market.

The commercial segment is expected to be the largest during the forecast period. Commercial aircraft are used to transport passengers, cargo, and mail. The body of these aircraft can be narrow or wide. Commercial aircraft offer speedy transportation and can be used for rescue operations...
during earthquakes, accidents, and floods. Generally, a type II fluid is utilized for de-icing purposes on a commercial aircraft. Moreover, increasing commercial air transport and the implementation of stringent aviation regulations on aircraft safety have increased the demand for aircraft de-icing equipment in last the few years. For instance, the FAA provides guidelines for de-icing narrow-body and wide-body aircraft. Furthermore, to cater to the rising air passenger traffic, aviation authorities are investing in advanced de-icing facilities. For example, in February 2019, The Chicago Department of Aviation (CDA) inaugurated a new Central Deicing Facility (CDF) at the O’Hare International Airport. The new facility is expected to enable the airline operators to de-ice the runway during snowfall. Hence, such factors are driving the segment growth. Thus, the Ku-band segment is expected to register a CAGR of 6.42% during the forecast period.

Companies Covered
The key players in the global aircraft de-icing market are BASF Corporation (Germany), Clariant AG (Switzerland), Contego Aviation Solutions (UK), General Atomics (US), Global Ground Support LLC (US), JBT Corporation (US), Kilfrost Group Ltd (UK), Textron Inc. (US), The Dow Chemical Company (US), United Technologies Corporation (US), Vestergaard Company A/S (Denmark), and Weihai Guangtai Airport Equipment Co. Ltd (China).

Key Developments
- In July 2019, Cryotech Deicing Technology, a subsidiary of General Atomics, launched Polar Guard Xtend, a type IV aircraft de-icing/anti-icing fluid. Polar Guard Xtend has an extended holdover time, superior wetting and low foaming properties, and low aquatic toxicity.
- In June 2017, BASF Corporation collaborated with SynaTek, LP (US) to support the development and production of de-icing and anti-icing fluid based on potassium formate; SynaTek, LP is one of the largest independent manufacturers and distributors of commercial turf, ornamental, and ice melt products in the US.
- In May 2016, Textron Specialized Vehicles Inc., a subsidiary of Textron Inc., acquired Premier Engineering and Manufacturing Inc (US) to introduce the latter’s deicers into its existing product line.

Market Segmentation
- By Equipment: De-Icing Trucks, Sweepers, and Others
- By Fluid Type: Type I, Type II, Type III, and Type IV
- By Application: Commercial and Military
- By Region: North America, Europe, Asia-Pacific, and Latin America, the Middle East, and Africa

Key Questions Addressed by the Report
- What was the historic market size (2018)?
- Which segmentation (Equipment/Fluid Type/Application) is driving market growth?
- What will be the growth rate from 2019 to 2025?
- Who are the key players in this market?
- What are the strategies adopted by the key players?
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>MARKET ATTRACTIVENESS ANALYSIS</td>
</tr>
<tr>
<td>1.1.1</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY EQUIPMENT</td>
</tr>
<tr>
<td>1.1.2</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY FLUID TYPE</td>
</tr>
<tr>
<td>1.1.3</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY APPLICATION</td>
</tr>
<tr>
<td>1.1.4</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY REGION</td>
</tr>
<tr>
<td>2</td>
<td>MARKET INTRODUCTION</td>
</tr>
<tr>
<td>3</td>
<td>RESEARCH METHODOLOGY</td>
</tr>
<tr>
<td>4</td>
<td>MARKET INSIGHTS</td>
</tr>
<tr>
<td>5</td>
<td>MARKET DYNAMICS</td>
</tr>
<tr>
<td>6</td>
<td>MARKET FACTOR ANALYSIS</td>
</tr>
<tr>
<td>7</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY EQUIPMENT</td>
</tr>
<tr>
<td>8</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY FLUID TYPE</td>
</tr>
<tr>
<td>9</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY APPLICATION</td>
</tr>
<tr>
<td>10</td>
<td>GLOBAL AIRCRAFT DE-ICING MARKET, BY REGION</td>
</tr>
<tr>
<td>11</td>
<td>COMPETITIVE LANDSCAPE</td>
</tr>
<tr>
<td>12</td>
<td>COMPANY PROFILES</td>
</tr>
<tr>
<td>13</td>
<td>APPENDIX</td>
</tr>
<tr>
<td>14</td>
<td>LIST OF TABLES</td>
</tr>
<tr>
<td>15</td>
<td>LIST OF FIGURES</td>
</tr>
</tbody>
</table>